

REMARKS

In the April 30, 2007 Office Action, all of the pending claims 1-27 stand rejected in view of prior art. No other objections or rejections were made in the Office Action.

Status of Claims and Amendments

In response to the April 30, 2007 Office Action, none of the claims are being amended by the current response except for corrections of minor errors in claim 1. Thus, claims 1-27 are pending, with claim 1 being the only independent claim. Reexamination and reconsideration of the pending claims are respectfully requested in view of the following comments.

Interview Summary

On July 19, 2007, the undersigned conducted a personal interview with Examiner Paradiso, who is in charge of the above-identified patent application. Applicant wishes to thank Examiner Paradiso for the opportunity to discuss the above-identified patent application during the Interview of July 19, 2007.

During the interview, the undersigned presented the arguments that independent claim 1 of the present application is allowable over Japanese Laid-Open Utility Model Patent Application Publication No. 5-34107 to Hirata (hereinafter "Hirata publication"). More specifically, the undersigned primarily argued the following points:

1. The Hirata publication merely discloses a bag supplying machine, and does *not* disclose or suggest a ***vertical bag-manufacturing and packaging machine*** having a configuration as recited in claim 1.
2. The Hirata publication does *not* disclose the drop orientation control unit ***disposed between the vertical bag-manufacturing and packaging machine and the conveyance unit***, and configured to feed the bag discharged from the bag-manufacturing and packaging machine while ***maintaining the drop orientation*** of the bag as recited in claim 1.

In response, Examiner Paradiso indicated that, although the Hirata publication does not explicitly disclose the vertical bag-manufacturing and packaging machine as recited in

claim 1, the vertical bag-manufacturing and packaging machine as recited in claim 1 may read on the structure disclosed in the Hirata publication because this limitation is not described in the claim in terms of structure of such a machine.

Examiner Paradiso agreed that the Hirata publication does not disclose the drop orientation control unit as recited in independent claim 1. However, Examiner Paradiso indicated that further prior art search would be required to determine the patentability of the pending claims.

Rejections - 35 U.S.C. § 102

In the numbered paragraphs 3 and 4 of the Office Action, claims 1-4, 6-14 and 17-27 stand rejected under 35 U.S.C. §102(b) as being anticipated by the Hirata publication. In response, Applicant respectfully traverses the rejection for the following reasons.

First, Applicant believes the Hirata publication *fails* to disclose or suggest a ***vertical bag-manufacturing and packaging machine*** that is configured to manufacture a bag by sealing a tubular continuous packaging material filled with items to be packaged, and to cut and discharge the bag at a predetermined discharge position as recited in independent claim 1.

More specifically, the Hirata publication merely discloses a bag supplying machine that feeds *empty* bags stored in the stocker 8 one by one using the conveyor belt 1 and the fast-forwarding belt 6. The Hirata publication is ***absolutely silent*** about any part or structure that could be considered to correspond to the vertical bag-manufacturing and packaging machine as recited in independent claim 1. In other words, the Hirata publication does ***not*** disclose or suggest any structure or machine that is configured to manufacture a bag by ***sealing a tubular continuous packaging material filled with items to be packaged***, and to

cut and discharge the bag at a predetermined discharge position as recited in independent claim 1.

Second, independent claim 1 further recites the drop orientation control unit *disposed between the vertical bag-manufacturing and packaging machine and the conveyance unit*, and configured to feed the bag discharged from the bag-manufacturing and packaging machine while *maintaining the drop orientation* of the bag. Applicant believes such arrangement recited in independent claim 1 is *also not* disclosed or suggested by the Hirata publication.

As discussed above, the Hirata publication only discloses a bag supplying machine that supplies the empty bags from the stocker 8 via the conveyor belt 1, and the Hirata publication *fails* to disclose or suggest any structure that corresponds to *the vertical bag-manufacturing and packaging machine* as recited in independent claim 1. Therefore, the Hirata publication does *not* disclose or suggest the drop orientation control unit *disposed between the vertical bag-manufacturing and packaging machine and the conveyance unit* as recited in independent claim 1. Moreover, since there is *no* structure corresponding to the vertical bag-manufacturing and packaging machine that discharges (drops) the manufactured bag in the Hirata publication, it also *fails* to disclose or suggest an idea of *maintaining the drop orientation* of the bag as recited in independent claim 1.

It is well settled under U.S. patent law that for a reference to anticipate a claim, the reference must disclose *each* and *every* element of the claim *within the reference*. Therefore, Applicant respectfully submits that claim 1 is *not* anticipated by the prior art of record. Withdrawal of this rejection is respectfully requested.

Moreover, Applicant believes that dependent claims 2-4, 6-14 and 17-27 are also allowable over the prior art of record in that they depend from independent claim 1, and

therefore are allowable for the reasons stated above. Thus, Applicant believes that since the prior art of record does not anticipate the independent claim 1, neither does the prior art anticipate the dependent claims.

Also, dependent claims 2-4, 6-14 and 17-27 are further allowable because they include additional limitations. More specifically, Applicant believes at least some of the limitations recited in dependent claims are clearly *not* disclosed or suggested by the Hirata publication. For example, claim 10 recites specific structures of the vertical bag-manufacturing and packaging machine such as *a longitudinal sealing mechanism* and a *transverse sealing mechanism*. Claim 11 recites that the transverse sealing mechanism of the vertical bag-manufacturing and packaging machine includes a pair of *rotary-type sealing jaws*. Claim 12 recites that the conveyance unit is disposed at a position that is *directly below the pair of rotors* and *lower by about a conveyance direction length of one bag*. Claim 17 recites that a positioning member that supports the pair of rotors so as to allow the pair of rotors to adjust *their positions* with respect to the vertical bag-manufacturing and packaging machine. Claim 19 recites that the rotor *rotates at the same speed as a drop speed* at which the bag is discharged from the vertical bag-manufacturing and packaging machine or at a *faster speed* than the drop speed. Claim 21 recites a *pullout mechanism* that slidably supports the rotor so as to allow the rotor to be pulled from between the vertical bag-manufacturing and packaging machine and the conveyance unit. Claim 22 recites that side portions of the rotor in the rotational axis direction of the rotor are formed by a *harder* material than material with which the center portion of the rotor is formed. Claim 23 recites that the surface of the rotor is covered by a *brush* that radially spreads around the rotational axis of the rotor, and bristles of the brush are *longer* at both side portions in the rotational axis direction of the rotor than those at the center portion. Claim 24 recites that the rotor

includes a *cooling mechanism* configured to cool a seal portion of the bag discharged from the vertical bag-manufacturing and packaging machine. Claim 25 recites that the conveyance unit has a *fixed chute*, and the drop orientation control unit is configured to *sandwich* the bag discharged from the vertical bag-manufacturing and packaging machine between the rotor and a conveyance surface of the fixed chute.

Applicant believes such specific arrangements of the bag-manufacturing and packaging system recited in the dependent claims are *not* disclosed or suggested by the Hirata publication or any other prior art of record.

Accordingly, Applicant respectfully requests withdrawal of the rejection.

Rejections - 35 U.S.C. § 103

In the numbered paragraphs 5 and 6 of the Office Action, claims 5, 15 and 16 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the Hirata publication. Applicant respectfully traverses the rejection for the following reasons.

As discussed above, the Hirata publication does *not* anticipate the bag-manufacturing and packaging system as recited in independent claim 1. Applicant further asserts that the Hirata publication also *fails* to render the limitations as recited in independent claim 1 obvious. It is well settled in U.S. patent law that the mere fact that the prior art can be modified does *not* make the modification obvious, unless the prior art provides an *apparent reason* for the desirability of the modification.

In the present case, as discussed above, the Hirata publication merely discloses a bag supplying machine that feeds the empty bags from the stocker 8. The Hirata publication is *absolutely silent* about any structure or machine that is configured to manufacture a bag by *sealing a tubular continuous packaging material filled with items to be packaged*, and to cut and discharge the bag at a predetermined discharge position as the vertical bag-

manufacturing and packaging machine recited in independent claim 1. Moreover, since there is *no* structure corresponding to the vertical bag-manufacturing and packaging machine that discharges (drops) the manufactured bag in the Hirata publication, it also *fails* to disclose or suggest an idea of *maintaining the drop orientation* of the bag as recited in independent claim 1.

Accordingly, the Hirata publication lacks any *apparent reason*, suggestion or expectation of success for modifying the reference to create the Applicant's unique arrangement of the bag-manufacturing and packaging system as recited in independent claim 1. More specifically, if the bag supplying machine of the Hirata publication were somehow modified to meet the claims of the present invention, it would require a *complete reconstruction* of the bag supplying machine of the Hirata publication patent, which would *destroy* the teaching of the Hirata publication. Thus, Applicant believes independent claim 1 is not rendered obvious over the Hirata publication or any other prior art of record.

Applicant believes that dependent claims 5, 15 and 16 are also allowable over the prior art of record in that they depend from independent claim 1, and therefore are allowable for the reasons stated above. Thus, Applicant believes that since the prior art of record does not disclose or suggest the invention as set forth in independent claim 1, the prior art of record also fails to disclose or suggest the inventions as set forth in the dependent claims.

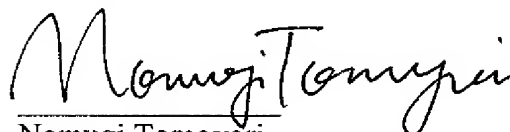
Also, the dependent claims 5, 15 and 16 are further allowable because they include additional limitations. More specifically, claims 5, 15 and 16 recite that an *interval* between the pair of rotors of the drop orientation control unit is *adjustable*. Applicant believes the Hirata publication lacks any *apparent reason*, suggestion or expectation of success for modifying the reference to create the bag-manufacturing and packaging system recited in these dependent claims.

Therefore, Applicant respectfully requests that this rejection be withdrawn in view of the above comments.

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In view of the foregoing comments, Applicant respectfully asserts that claims 1-27 are in condition for allowance. Reexamination and reconsideration of the pending claims are respectfully requested.

Respectfully submitted,



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